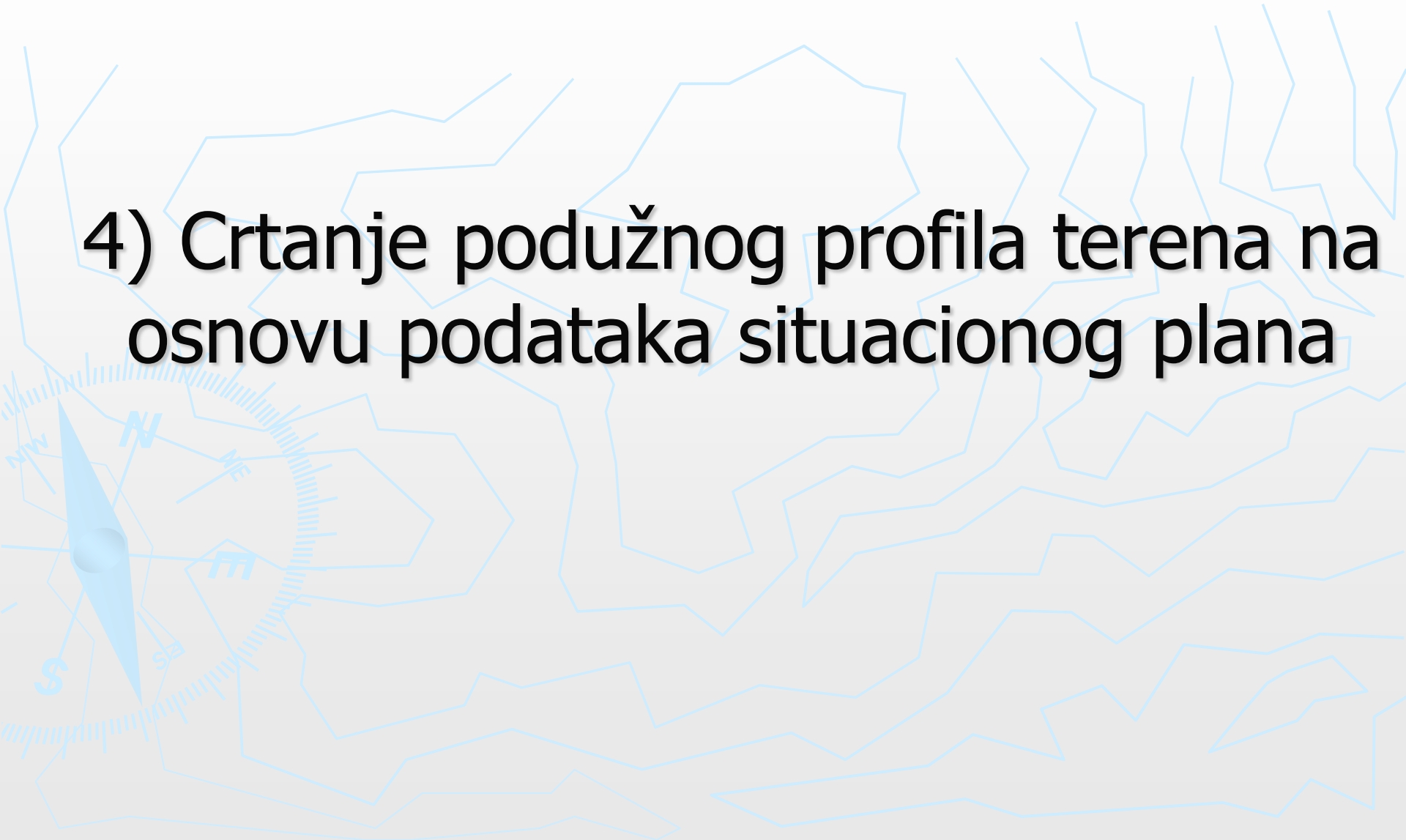
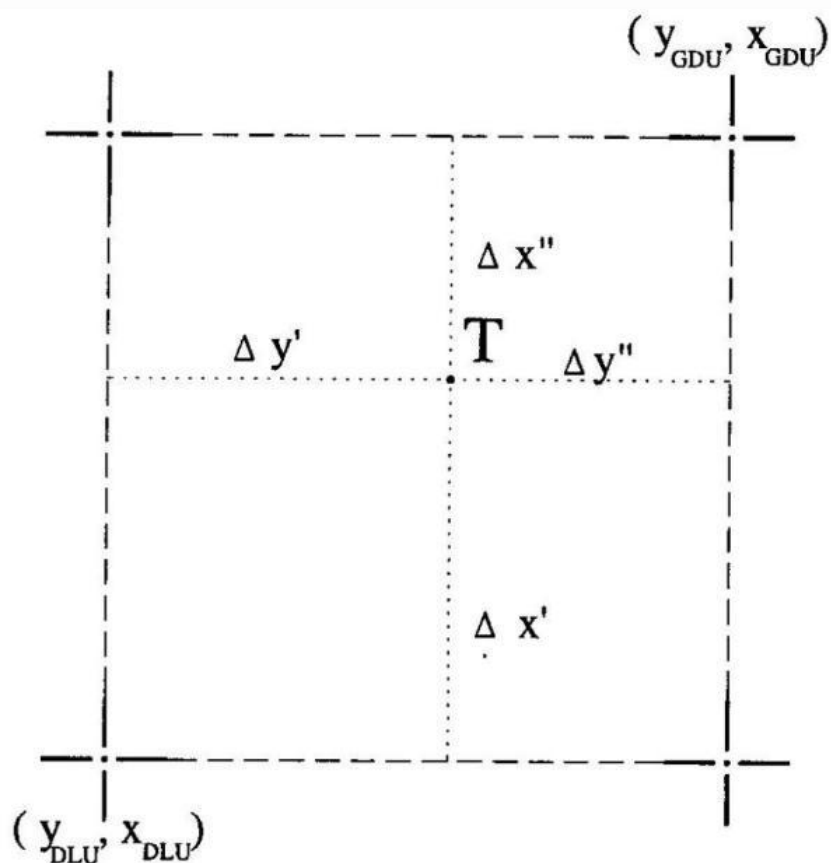


4) Crtanje podužnog profila terena na osnovu podataka situacionog plana



Grafičko određivanje koordinata tačaka



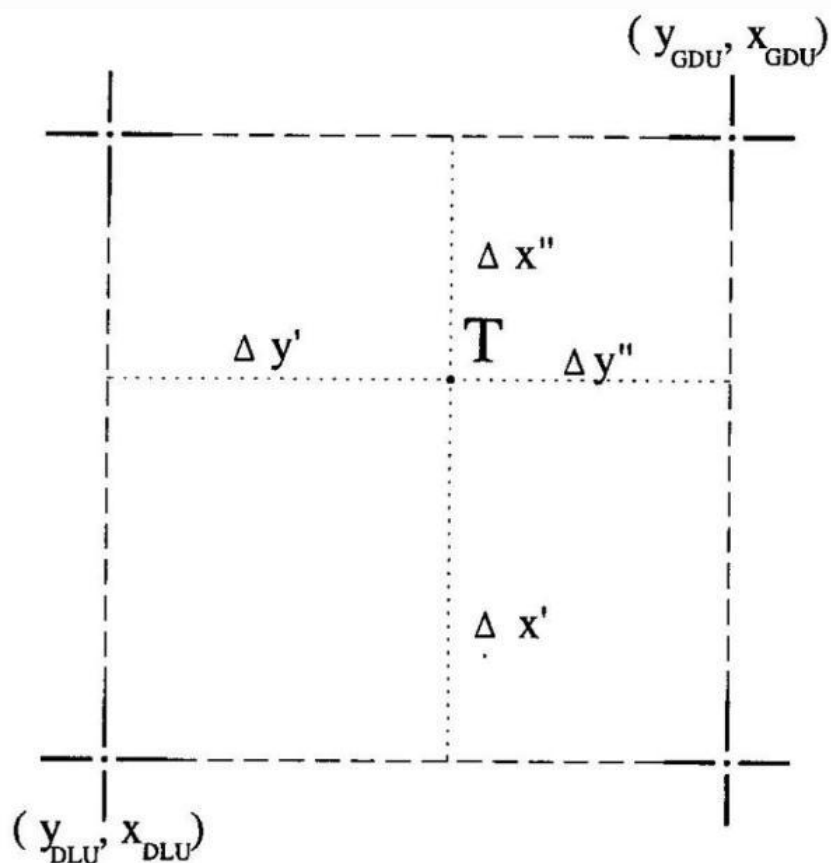
DLU-donji lijevi ugao
GDU-gornji desni ugao

koordinatna razlike (u razmjeri plana)

$$\Delta y = Y_{GDU} - Y_{DLU} = m$$

$$\Delta x = X_{GDU} - X_{DLU} = m$$

Grafičko određivanje koordinata tačaka



Grafički mjerene koordinatne razlike za nepoznatu tačku T

$$\Delta y', \Delta y'' \text{ (mm)} \rightarrow \text{(m)}$$

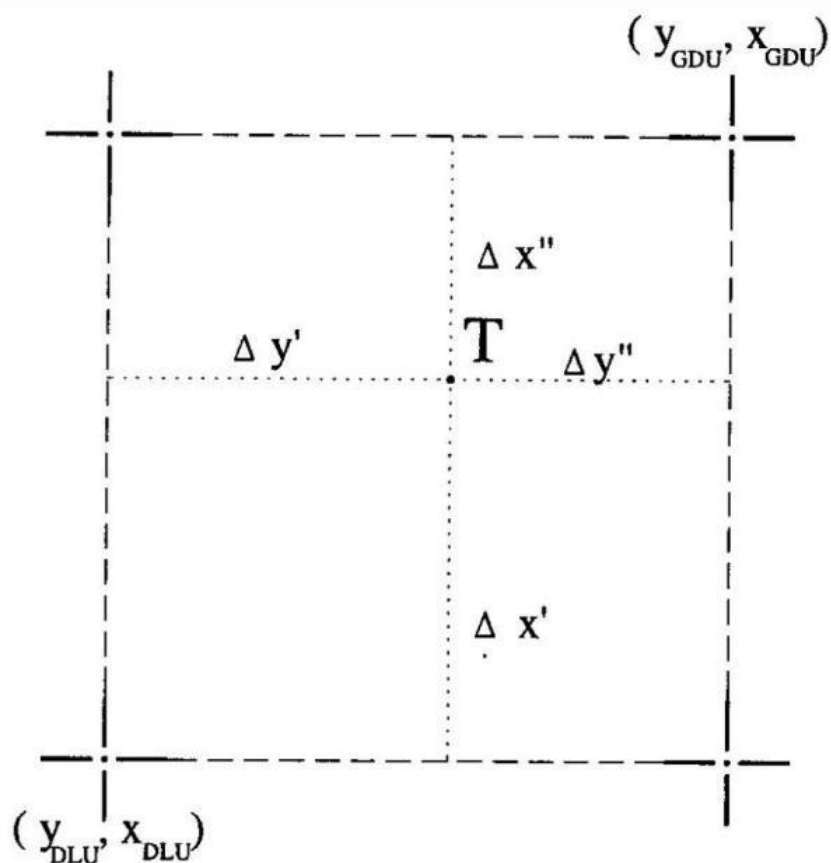
$$\Delta x', \Delta x'' \text{ (mm)} \rightarrow \text{(m)}$$

Koordinatne razlike koje su u mm množe se sa imeniocem razmjere M i podijele sa 1000 da bi se dobile u m.

Razmjera R 1:**M**, **M**-imenilac razmjere.

$$\text{npr. } \Delta y' \text{ (mm)} \cdot \mathbf{M}/1000 = \text{(m)}$$

Grafičko određivanje koordinata tačaka

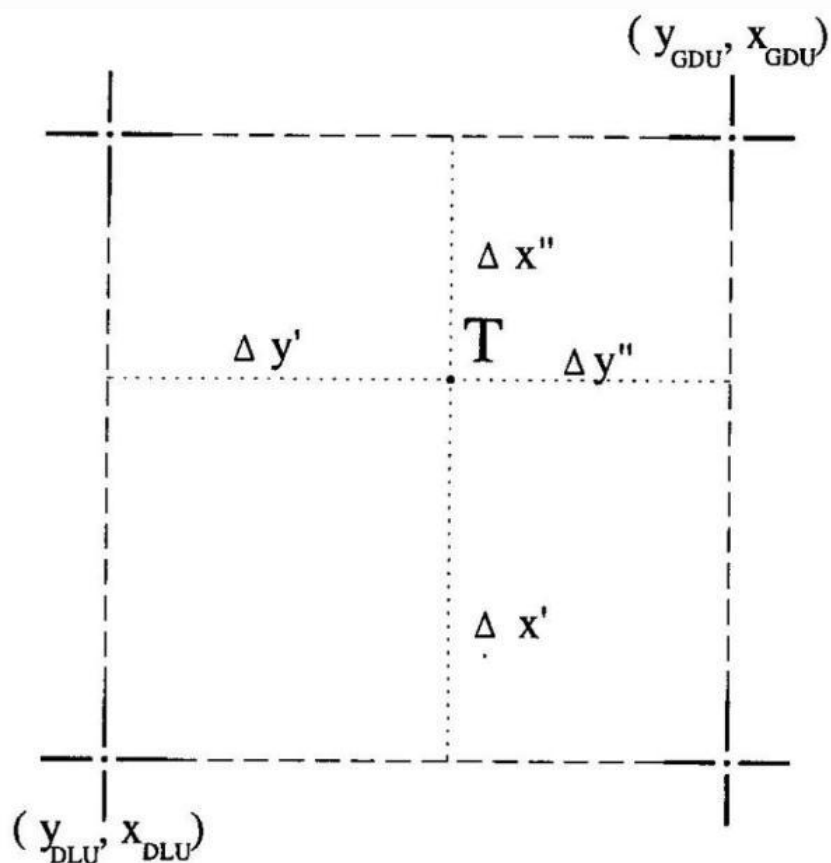


Koeficijent deformacija

$$k_y = \frac{\Delta y}{\Delta y' + \Delta y''} \quad \text{za y pravac}$$

$$k_x = \frac{\Delta x}{\Delta x' + \Delta x''} \quad \text{za x pravac}$$

Grafičko određivanje koordinata tačaka



Koordinatne razlike:

$$Y_T = Y_{DLU} + ky \cdot \Delta y' = (m)$$

$$X_T = X_{DLU} + kx \cdot \Delta x' = (m)$$

Kontrola

$$Y_T = Y_{GDU} - ky \cdot \Delta y'' = (m)$$

$$X_T = X_{GDU} - kx \cdot \Delta x'' = (m)$$

Primer:

1. Pravougle koordinate DLU I GDU

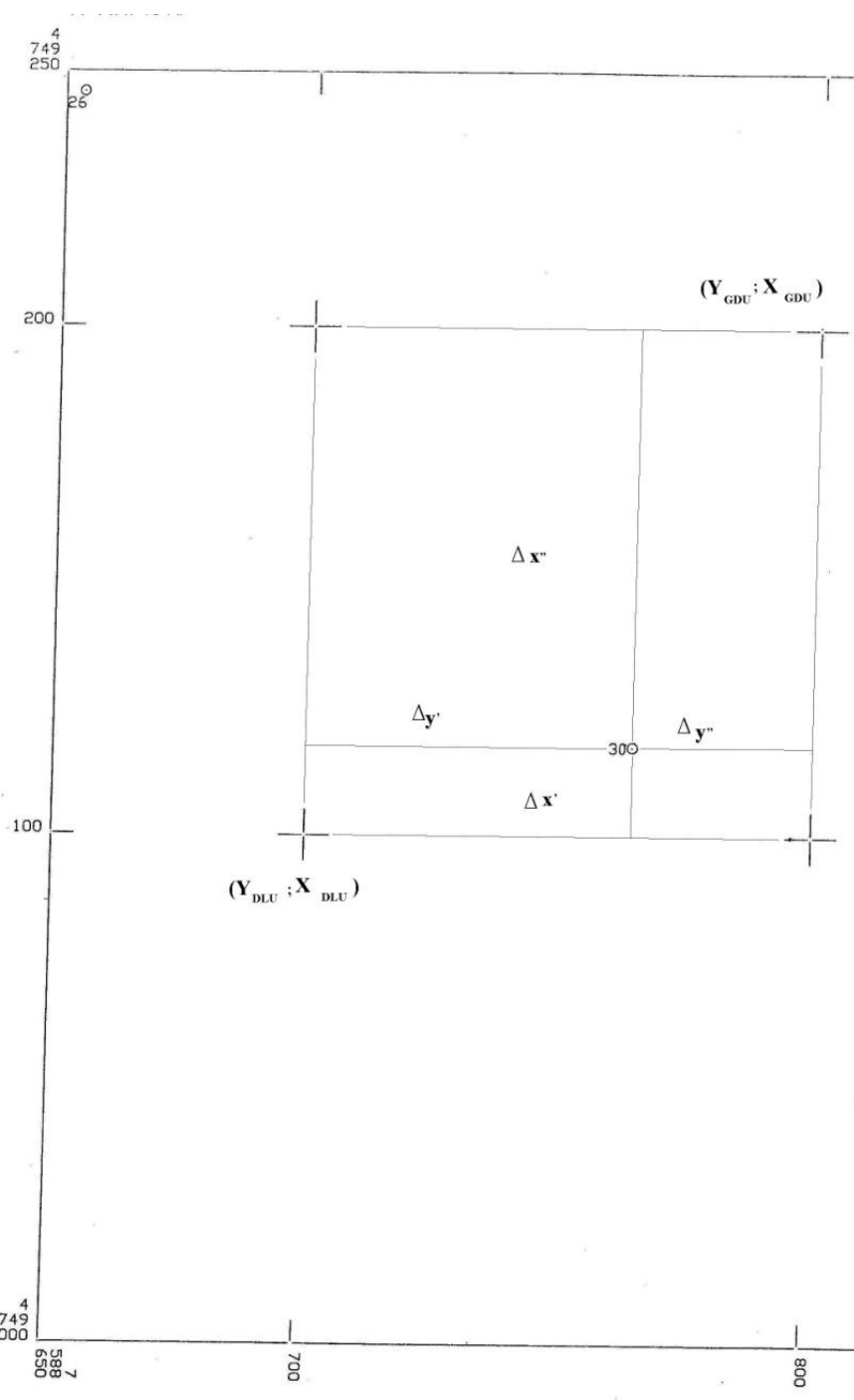
$$Y_{DLU} = 7588700 \quad Y_{GDU} = 7588800$$

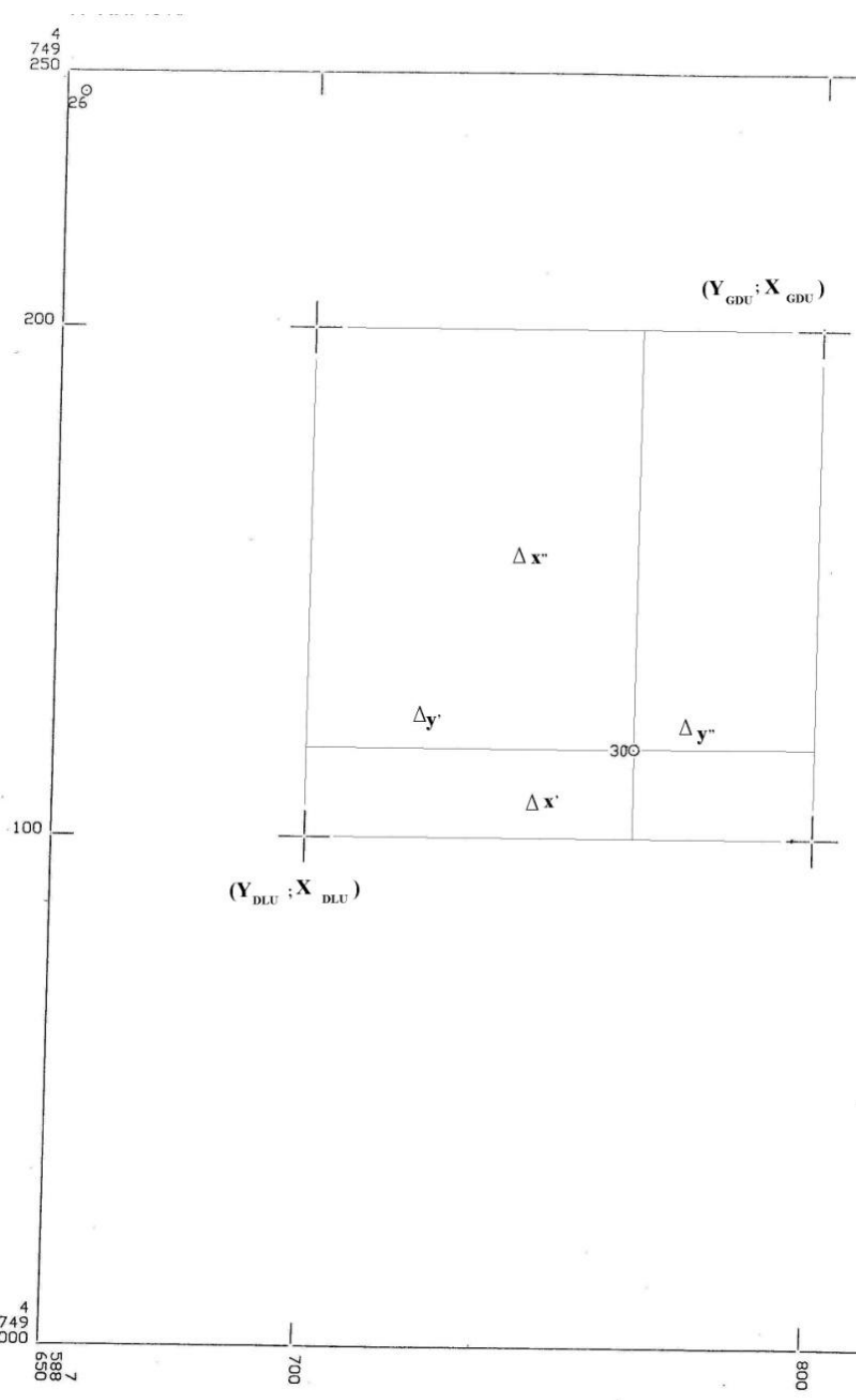
$$X_{DLU} = 4749100 \quad X_{GDU} = 4749200$$

2. Koordinatne razlike

$$\Delta y = Y_{GDU} - Y_{DLU} = 100 \text{ m}$$

$$\Delta x = X_{GDU} - X_{DLU} = 100 \text{ m}$$





Primer:

3. Grafički merene koordinatne razlike

$$\Delta y' = 62 \text{ mm} \frac{1000}{1000} = 62 \text{ m}$$

$$\Delta x' = 12 \text{ mm} \frac{1000}{1000} = 12 \text{ m}$$

$$\Delta y'' = 34 \text{ mm} \frac{1000}{1000} = 34 \text{ m}$$

$$\Delta x'' = 80 \text{ mm} \frac{1000}{1000} = 80 \text{ m}$$

4. Koeficijent deformacije

$$k_y = \frac{\Delta y}{\Delta y' + \Delta y''} = 1,041666667$$

$$k_x = \frac{\Delta x}{\Delta x' + \Delta x''} = 1,086956522$$

Primer:

5. Koordinate tačke T

$$Y_T = Y_{DLU} + ky \cdot \Delta y' = 7588764.58$$

$$X_T = X_{DLU} + kx \cdot \Delta x' = 4749113.04$$

6. Kontrola

$$Y_{30} = Y_{GDU} - ky \cdot \Delta y'' = 7588764,58$$

$$X_{30} = X_{GDU} - kx \cdot \Delta x'' = 4749113,04$$

